

**GILA RIVER BASIN**

**09469500 GILA RIVER BELOW COOLIDGE DAM, AZ**

**LOCATION**--Lat 33° 10'10", long 110° 31'50", in SW<sub>1/4</sub> sec. 17, T.3 S., R.18 E. (unsurveyed), Pinal County, Hydrologic Unit 15050100, on left bank 2,200 ft downstream from Coolidge Dam.

**DRAINAGE AREA**--12,886 mi<sup>2</sup>.

**PERIOD OF RECORD**--July to Oct. 1899, Apr. 1900 to Mar. 1902, July to Sept. 1902, Dec. 1902 to Dec. 1904, Jan. to May 1905 (gage heights only), June to Nov. 1905; Aug. 1910 to Feb. 1911 (gage heights only); Apr. 1914 to current year. Published as "at San Carlos" 1899–1911, as "near San Carlos" 1914–26, and as "at Coolidge Dam" 1927–38.

**REVISED RECORDS**--WSP 629: 1915–16. WSP 1049: 1899–1904. WSP 1149: 19M), 1921, 1922(M), 1923, 1924(M). WSP 1283: Drainage area.

**GAGE**--Water-stage recorder and Parshall flume. Datum of gage is 2,309.33 ft above sea level. Prior to Feb. 5, 1911, nonrecording gage at various sites and datums upstream from mouth of San Carlos River. Apr. 29, 1914, to Mar. 8, 1937, water-stage recorder at various sites within 1 mi upstream from present site at different datums. Mar. 27, 1979 to Oct. 10, 1980, and since Oct. 4, 1983, supplementary water-stage recorder at site on left bank 1,000 ft upstream at datum 2,309.5 ft above sea level, used above discharges at approximately 2,000 ft<sup>3</sup>/s, maximum capacity of parshall flume.

**REMARKS**--Records good except for estimated daily discharges and those below 20 ft<sup>3</sup>/s, which are fair. Flow regulated by San Carlos Reservoir since Nov. 15, 1928. (See sta 09469000.) Record includes flow of Warm Springs, which enters between the dam and gage. Large diversions above San Carlos Reservoir for irrigation, metallurgical treatment of ore, and municipal supply; about 69,000 acres of land was irrigated, a considerable portion by pumping from ground water.

**AVERAGE DISCHARGE** (adjusted for storage in San Carlos Reservoir)--90 years (water years 1901, 1904, 1915–2002) 401 ft<sup>3</sup>/s, 290,500 acre-ft/yr; median of yearly mean discharges, 250 ft<sup>3</sup>/s, 181,000 acre-ft/yr.

**EXTREMES FOR PERIOD OF RECORD**--1914–28: Maximum discharge, 130,000 ft<sup>3</sup>/s Jan. 20, 1916, estimated on basis of peak discharge near Solomon and at Kelvin; no flow at times.

1928–2000: Maximum discharge, 32,800 ft<sup>3</sup>/s Jan. 20, 21, 1993 from calculated discharge over Coolidge Dam; no flow at times prior to 1938; minimum daily since 1938, 0.18 ft<sup>3</sup>/s Oct. 5–9 and 19–21, 2000.

**EXTREMES FOR CURRENT YEAR**--Maximum daily discharge, 389 ft<sup>3</sup>/s Dec. 27; minimum daily discharge, 0.40 ft<sup>3</sup>/s Apr. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	249	0.81	206	118	85	234	e40	0.81	1.2	0.89	1.8	1.7
2	248	0.81	306	120	85	234	40	0.89	1.3	1.1	1.8	1.7
3	275	0.81	306	131	85	234	38	1.1	1.2	1.1	1.8	1.7
4	293	0.81	306	138	85	234	e38	1.1	1.1	1.1	1.8	1.7
5	293	0.81	304	141	89	258	e38	0.90	1.1	1.1	1.8	1.7
6	293	0.81	303	142	95	280	e34	0.81	1.1	1.1	1.8	1.8
7	293	0.81	303	142	101	301	e30	0.93	1.4	1.0	138	2.0
8	290	0.81	303	157	104	333	e30	0.48	1.5	1.1	233	2.0
9	290	0.81	302	166	104	332	29	1.1	1.5	1.1	214	2.0
10	290	0.81	300	137	105	332	27	0.42	1.7	1.1	175	2.0
11	252	0.81	299	106	106	333	26	0.42	1.6	1.1	175	2.0
12	228	0.81	240	99	106	332	30	0.58	e1.3	1.1	159	49
13	227	0.81	185	99	106	330	31	0.78	e1.1	1.1	157	115
14	228	0.81	166	99	106	336	31	0.76	1.1	1.1	138	117
15	229	0.81	166	99	104	341	31	0.74	1.1	1.1	139	176
16	229	0.81	214	100	101	296	30	0.75	1.1	1.1	140	175
17	229	0.81	239	70	114	262	30	0.81	1.1	1.1	53	120
18	229	0.81	238	53	124	258	30	0.81	1.1	1.1	2.2	113
19	229	0.81	238	53	124	259	29	64	1.1	1.1	2.4	117
20	229	0.81	238	53	124	260	29	94	0.81	1.1	2.4	88
21	229	0.81	185	53	124	260	29	93	0.81	1.1	2.0	27
22	229	0.81	148	53	207	262	11	92	0.81	1.2	2.0	1.7
23	226	0.81	246	54	275	174	0.40	92	0.81	1.5	2.0	25
24	219	0.81	341	54	275	116	0.42	93	0.81	1.9	2.0	52
25	218	0.81	361	54	275	114	0.59	94	0.81	2.2	1.9	49
26	e78	0.81	362	74	275	109	0.59	34	0.81	2.0	1.7	53
27	e1.1	0.81	389	85	265	107	0.69	1.1	0.81	2.1	1.6	86
28	e1.1	0.81	376	85	248	108	0.76	1.1	0.81	1.9	1.3	118
29	e0.99	0.81	205	85	---	e108	0.84	1.1	0.81	1.7	1.6	118
30	e1.1	0.81	117	85	---	e108	0.81	1.1	0.81	1.7	1.6	122
31	0.96	---	117	85	---	e68	---	1.1	---	1.8	1.5	---
TOTAL	6327.25	24.30	8009	2990	3997	7313	686.10	675.69	32.61	40.79	1758.0	1742.0
MEAN	204.1	0.810	258.4	96.45	142.8	235.9	22.87	21.80	1.087	1.316	56.71	58.07
MAX	293	0.81	389	166	275	341	40	94	1.7	2.2	233	176
MIN	0.96	0.81	117	53	85	68	0.40	0.42	0.81	0.89	1.3	1.7
AC-FT	12550	48	15890	5930	7930	14510	1360	1340	65	81	3490	3460

CAL YR 2001    TOTAL 125435.14    MEAN 343.7    MAX 803    MIN 0.81    AC-FT 248800  
WTR YR 2002    TOTAL 33595.74    MEAN 92.04    MAX 389    MIN 0.40    AC-FT 66640

e Estimated